Human/Machine Interfaces

Magelis™ GTU Universal panels

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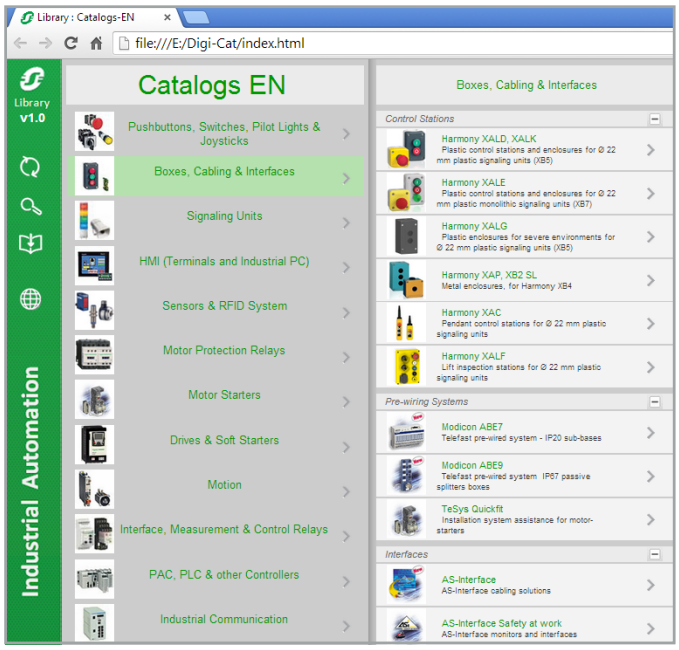

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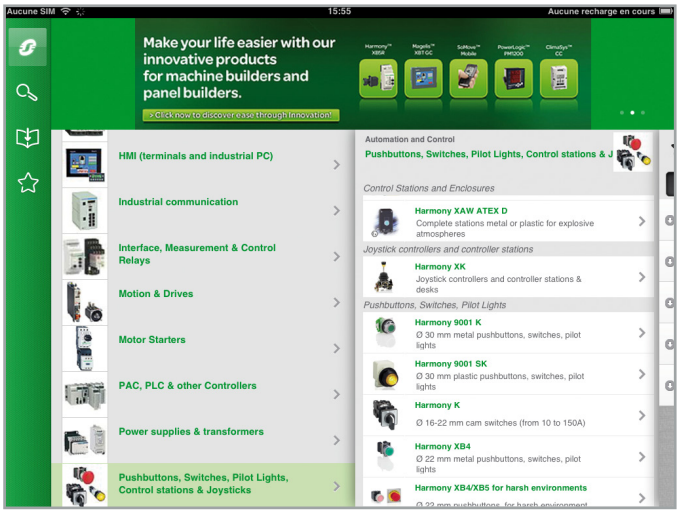
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Make your life easier with our innovative products for machine builders and panel builders.
HMI (terminals and industrial PC)
Industrial communication
Interface, Measurement & Control Relays
Motion & Drives
Motor Starters
PAC, PLC & other Controllers
Power supplies & transformers
Pushbuttons, Switches, Pilot Lights, Control stations & Joysticks
Automation and Control
Pushbuttons, Switches, Pilot Lights, Control stations & J
Control Stations and Enclosures
Harmony XAW ATEX D
Joystick controllers and controller stations
Harmony XK
Pushbuttons, Switches, Pilot Lights
Harmony 9001 K
Harmony 9001 SK
Harmony K
Harmony XB4
Harmony XB4/XB5 for harsh environments

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Magelis™ GTU Universal panels

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Operator dialogue terminals
Magelis™ GTU Universal panels
Unique HMI flexibility

Magelis™ GTU Universal panels

Magelis GTU is a high-end HMI range designed with the uniqueness of modularity that allows you to select and assemble the best combination of display unit and processing box as per application requirements.

Magelis Universal panels feature operator efficiency, simplified installation and flexibility that fit all industry architecture. This range comprises of display modules (Advanced and Smart) and box modules (Premium and Open).

Advanced display + Premium box

Smart display + Open box

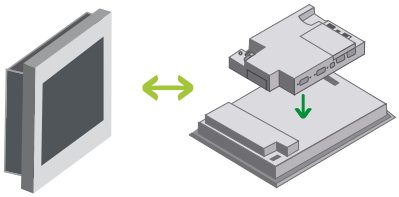
Certified for use in the most demanding automation systems, including industrial control equipments, hazardous locations, and marine applications.

Unique HMI flexibility

Modular and scalable

> Choice of screen size, format, image quality and processing levels enable Magelis GTU to be used in wide range of applications.

> Universal panels are available in various combinations by simple assembling of display and box modules.



Magelis GTU panel = Display module + Box module

Wide power supply range

Magelis GTU is the first Schneider HMI with 12...24 V ⎓ power supply range. This enables them to be installed in standard cabinet plants and also low-power remote station cabinet plants that are powered by battery.

Simplified installation and maintenance

> Easy mounting with embedded and retractable fasteners and no accessories.

Push the box LOCK backward

Insert protruding points of box into the holes of display

Pull the box LOCK forward

> Robust panel housed in an aluminum material of high temperature resistance (up to 60 °C).

> Dual removable storage units on Magelis GTU boxes saves time during maintenance of broken terminals.

> Easy migration of Magelis GTU panels with Smart display as they have cut-outs same as XBTGT and Magelis GTW.

Magelis GTU → Multiple combinations with easy assembling

Operator dialogue terminals
Magelis™ GTU Universal panels
High level performance, Smartphone-like interface

Isolation on RJ45 and RS-485 port for reliable communication in complex grounding applications.

High level performance

Monitoring and communication capability

> Dual LAN separates IT and PLC communication for better performance and data security.

> Scaler function with automatic adjustment enables Smart display units to manage application files of any display size and resolution.

> Easy integration into industrial architecture via embedded dual interfaces (2 serial ports with different signal types, 2 Gigabit Ethernet ports, 2/4 USB host ports) and an optional interface for Fieldbus.

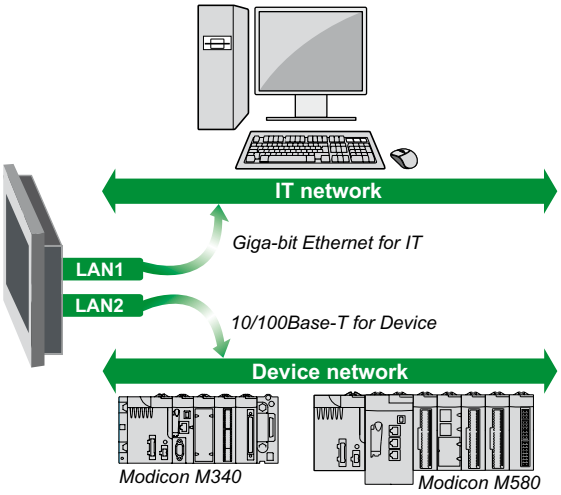
Operator efficiency with good visualization

> Maximum screen comfort with LED backlight for excellent brightness, complete dimming (100 levels) and auto adjustment to environment.

> 16/9 wide format of Advanced display unit for easy sharing of pictures with external multimedia devices.

> Multi-screen option available on Open box unit where a second Magelis *i*Display or Monitor display can be connected via a DVI link.

Box units of Magelis GTU panels have SD or CFast card slots for huge external data storage.



Smartphone-like interface

Optimized design

> Optimized for the latest Schneider Electric HMI configuration software, Vijeo XD.

> Easy and comfortable handling with intuitive navigation and multi-connectivity options (including remote access) like smartphones/tablets.

Vijeo XD software

High resolution multi-touch screen

> Multi-touch screen supports zoom in/out, swipe, and scroll through menus even with protective gloves or protective display screen cover.

> High resolution screen with 16M colors gives a crystal-clear view of the key functions and tools (Office Viewer, Adobe Reader, Internet Explorer, Multimedia player, etc) as in a PC.

Intelligent Data Service

Open box Magelis GTU panels enable direct use of IDS (Vijeo Designer add-on) for database link and traceability.

Magelis GTU → An HMI adapted for Plant Struxure

Operator dialogue terminals

Magelis™ GTU Universal panels

Applications		**Display of text messages, graphic objects and synoptic views Control and configuration of data**		
Model		**Advanced display**		
Screen	Definition	800 x 480 pixels, 262K colors	1280 x 800 pixels, 262K colors	1280 x 800 pixels, 262K colors
	Type	7" color TFT	10" color TFT	12" color TFT
Data entry	Touch pad	Single touch resistive	Single touch resistive	Single touch resistive
Functions	Brightness sensor	–	–	–
	Front USB ports	–	–	–
Ambient temperature		0…60 °C		
Supply voltage		12...24 V ⎓		
Dimensions	External W×H×D mm/*in.*	204 × 149 × 67/ *8.03 × 5.86 × 2.64*	269 × 199 × 67/ *10.59 × 7.83 × 2.64*	309 × 231 × 67/ *12.17 × 9.09 × 2.64*
	Cut-out W×H mm/*in.*	190 × 135/*7.48 × 5.31*	255 × 185/*10.03 × 7.28*	295 × 217/*11.61 × 8.54*
Conformity to standards		EN61131-2, UL 508, ANSI/ISA12.12.01, CSA C22.2 No 142 & No 213, ATEX Zone 2/22 *(2)*		
Compatible box models		Premium and Open box models		
Type of display unit		**HMIDT351**	**HMIDT551**	**HMIDT651**
Pages		13		

Model		**Premium box**		
CPU		RISC, 600 MHz		
Operating system		Real Time Magelis on 1 GB SD storage		
Pre-installed software		Vijeo Designer RT		
Memory	RAM/SRAM (backup)	256 MB/512 KB		
	Storage units	x2 SD card		
Functions	Real time clock	Yes, built-in		
	Graphic	Alphanumeric, bitmap, bargraph, gauge, tank, indicator, curve, polygon, button, lamp		
	Data	Alarm with log, trend with log, recipe, script		
	Variables max.	8000		
Protocols		Uni-TE, Modbus, Modbus TCP/IP and PLC brands Siemens, Omron, Mitsubishi, Allen-Bradley (Rockwell Automation), ABB		
Communication	Ethernet port	x2 RJ45 10BASE-T/100BASE-TX/1000BASE-T		
	Serial line	RJ45 RS485 (COM1) + SubD9 RS232/RS485/RS422 (COM2)		
	Fieldbus	Fipio/Fipway and Modbus Plus via USB Gateway		
	USB	2 USB Type-A (2.0) + 1 Type-mini B (2.0)		
Discrete I/O		Terminal block with 1 speaker + 1 alarm + 1 buzzer output		
Multimedia I/O		–		
Display units supported		HMIDT351, HMIDT551, HMIDT651, HMIDT542, HMIDT642, HMIDT732		
Compatible display models		Advanced and Smart display models		
Type of box unit		**HMIG3U**		
Pages		13		

(1) Intelligent Data Service (IDS) of Vijeo Designer is a add-on option.
***Note**: Magelis HMIGTU = All combinations of display and box modules are possible.*
(2) 4th quarter of 2014.

Applications		**Display of text messages, graphic objects and synoptic views Control and configuration of data**		
Model		**Smart display**		
Screen	Definition	800 x 600 pixels,16M colors	1024 x 768 pixels, 16M colors	1024 x 768 pixels, 16M colors
	Type	10.4" color TFT	12.1" color TFT	15" color TFT
Data entry	Touch pad	Multi touch resistive	Multi touch resistive	Multi touch resistive
Functions	Brightness sensor	Yes	Yes	Yes
	Front USB ports	1 host + 1 device	1 host + 1 device	1 host + 1 device
Ambient temperature		0…60 °C		
Supply voltage		12...24 V ⎓		
Dimensions	External W×H×D mm/*in.*	273 × 215 × 67/ *10.74 × 8.46 × 2.64*	315 × 241 × 67/ *12.40 × 9.50 × 2.64*	397 × 296 × 67/ *15.63 × 11.65 × 2.64*
	Cut-out W×H mm/*in.*	*259 × 201/10.20 × 7.91*	302 × 228/*11.90 × 8.98*	384 × 283/*15.11 × 11.14*
Conformity to standards		EN61131-2, UL 508, ISA12.12 ,CSA C22.2 No 142 & No 213 , ATEX Zone 2/22		
Compatible box models		Premium and Open box models		
Type of display unit		**HMIDT542**	**HMIDT642**	**HMIDT732**
Pages		13		

Model		**Open box**		
CPU		x86, 1.3 GHz		
Operating system		Windows Embedded 7 on 16 GB CFast storage		
Pre-installed software		Vijeo Designer RT, Office & PDF Readers, CAD Viewer, Internet browser, .Net 4.0, VNC Client/Server, Vijeo Citect web client *(1)*		
Memory	RAM/SRAM (backup)	2 GB/512 KB		
	Storage units	SD card and x2 CFast		
Functions	Real time clock	Yes, built-in		
	Graphic	Alphanumeric, bitmap, bargraph, gauge, tank, indicator, curve, polygon, button, lamp		
	Data	Alarm with log, trend with log, recipe, script		
	Variables max.	12000		
Protocols		Uni-TE, Modbus, Modbus TCP/IP and PLC brands Siemens, Omron, Mitsubishi, Allen-Bradley (Rockwell Automation), ABB		
Communication	Ethernet port	x2 RJ45 10BASE-T/100BASE-TX/1000BASE-T		
	Serial line	RJ45 RS485 (COM1) + SubD9 RS232/RS485/RS422 (COM2)		
	Fieldbus	Modbus Plus via USB Gateway		
	USB	3 USB Type-A (2.0) + 1 Type-mini B (2.0)		
Discrete I/O		Terminal block with 1 speaker + 1 alarm + 1 buzzer output		
Multimedia I/O		1 Microphone input + 1 DVI output		
Display units supported		HMIDT351, HMIDT551, HMIDT651, HMIDT542, HMIDT642, HMIDT732		
Compatible display models		Advanced and Smart display models		
Type of box unit		**HMIG5U**		
Pages		13		

Operator dialogue terminals
Magelis™ GTU Universal panels

Magelis HMIGTU color display modules

+

Magelis HMIGTU box modules

Presentation

The Magelis GTU series are the high-end HMIs built on innovative concept of modularity. This enables freedom of selection and easy adaptation of best Universal panels for your application. These panels comprise of front panel display and processing box modules.

The display modules are available in two versions:
- ■ Advanced display: compact wide screen in 3 sizes
  - □ 7"
  - □ 10"
  - □ 12"
- ■ Smart display: large multi-touch screen in 3 sizes
  - □ 10.4"
  - □ 12.1"
  - □ 15"

The box modules are available in two versions:
- ■ Premium box: with real time operating system
- ■ Open box: with Windows 7 embedded operating system and large storage

Operation

Magelis GTU Universal panels feature powerful information and communication technologies with maximum operator efficiency in visualization, which depending on the model include:
- ■ Clear display with wide format or multi-touch technology
- ■ High level of communication with all dual embedded interfaces: 2 serial ports , 2 Ethernet Gigabit ports and minimum 2 USB host ports (Multi-link, Webserver and FTP, E-mail, Remote services)
- ■ Removable storage units for easy save/restore of operating system, HMI application and user data (SD memory cards, CFast cards and USB memory stick management)
- ■ Management of many peripherals: Printers, bar code readers, external monitor display, external keyboard/mouse, and Schneider Electric smart USB accessories (tower light, illuminated switch, keyboard, biometric switch, USB keyboard)

Environment

The Magelis GTU Universal range of high-end panels has been designed in accordance with numerous standards, certifications and requirements:
- ■ Standards: IEC/EN 61131-2, IEC 61000-6-2 and IEC 61000-6-4
- ■ Certifications:
  - □ RCM (Australia), EAC (Eurasia), KC (Korea)
  - □ cULus Industrial Control Equipment (UL508 and CSA 22.2 n°142)
  - □ cULus Hazardous Locations (ANSI/ISA 12.12.01 and CSA 22.2 n°213)
  - □ Atex zone 2/22 *(1)*
  - □ Marine certifications *(1)*
- ■ Operating temperature: up to 60 °C
- ■ Degree of protection front face IP 66/67(according to IEC 60529)
- ■ Extended power supply voltage 12…24 V ⎓
- ■ Easy installation with anti-drop and retractable embedded fasteners

Configuration

Like all other Magelis panels, Magelis GTU Universal panels can be configured using Vijeo Designer software in a Windows environment *(2)*. Vijeo Designer software has an advanced user interface with many configurable windows enabling projects to be developed quickly and easily.

Magelis GTU is also configurable with the HMI configuration software Vijeo XD. This software with a new user interface brings more ease to project development and online updates. Vijeo XD allows you to create an innovative HMI project which can be operated on Magelis GTU like a smartphone *(3)*.

For more information on Vijeo Designer and Vijeo XD, please refer to our website www.schneider-electric.com.

Vijeo XD software

Vijeo Designer configuration software

(1) ATEX and Marine certifications by 4th quarter, 2014.
(2) Magelis GTU is compatible with Vijeo Designer version V6.2 SP1 or later.
(3) Magelis GTU is compatible with Vijeo XD version 1.0 or later.

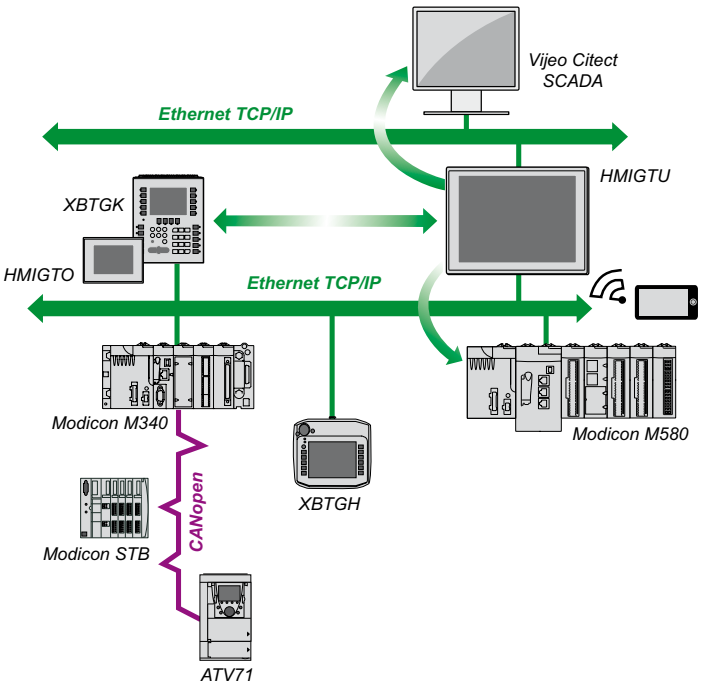
Description: page 10 | References: page 13 | Connections: page 20 | Substitution: page 19

Operator dialogue terminals
Magelis™ GTU Universal panels

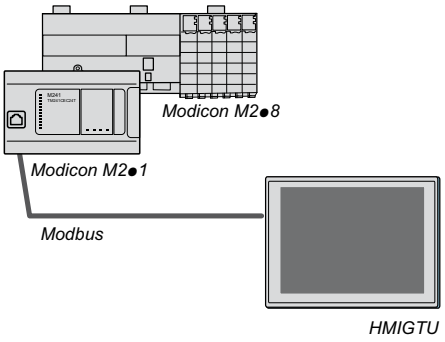
Communication

The following illustrations show the equipments that Universal panels can communciate via Ethernet and Modbus protocols.

Via Ethernet protocol



Via Modbus protocol



Universal panels communicate with PLCs via one or two integrated serial links, using communication protocols:
- Schneider Electric (Uni-TE, Modbus)
- Third-party: Mitsubishi Electric, Omron, Allen-Bradley and Siemens

Magelis GTU with two Ethernet ports can share data with other Magelis HMI, browse PLC's Webserver and SCADA server and also communicate with PLC's using:
- Modbus TCP protocol
- Third party Ethernet protocol

USB accessories for HMI terminals

The Magelis™ USB accessories are designed to expand the selection range of user applications by offering value-added/differentiated HMI solutions. These innovative USB accessories can be easily installed and operated with HMI terminals.

The Magelis USB accessories supported by Magelis GTU include:
- Harmony XVGU USB tower light (only on Premium Box)
- Harmony XB5S biometric USB switch
- Magelis HMIZ illuminated USB switch
- Magelis HMIZ USB keyboard (only on Premium Box)

For more information on HMI USB accessories, please refer to our website www.schneider-electric.com.

Description: page 10 | References: page 13 | Connections: page 20 | Substitution: page 19

Operator dialogue terminals
Magelis™ GTU Universal panels

Vijeo XD software

SoMachine software platform

Vijeo Designer configuration software

Functions

Magelis GTU panels offer the following functions:
- Display of animated synoptic views with 8 types of animation (pressing the touch panel, color changes, filling, movement, rotation, size, visibility and value display)
- Control, modification of numeric and alphanumeric values
- Display of current date and time
- Real-time and trending curves with log
- Alarm display, alarm log and management of alarm groups
- Multi-window management
- Operator-initiated page calls
- Multilingual application management (10 languages at the same time)
- Recipe management
- Data processing via Java script
- Storage of the application and logs on external application memory card in SD format or USB stick or CFast card
- Management of serial printers and barcode readers
- Sound Message management
- Mutli-screen support and cloning function on external monitor with DVI port connected to Open Box
- Web video support with view and record functions on Open box

In addition, Vijeo XD software provides muti-touch feature for HMIGTU display which is similar to smart phones (Drag, flick ,dual press gestures).

Architectures and communication

The Magelis GTU integrated *(1)* in MachineStruxure™ *(2)* automation solutions offer will help machine manufacturers (OEMs) to quickly design optimized machines (in terms of cost and energy efficiency).

MachineStruxure™ solutions are based on high performance control platforms and single software package SoMachine. SoMachine allows the development, commissioning and programming of machines. With Vijeo Designer software, SoMachine allows programming of terminals in Magelis range.

Universal panels have been designed for PlantStruxure™ *(3)* and MachineStruxure™ *(2)* architectures as well as for Transparent Ready equipment (combination of Web and Ethernet TCP/IP technologies). Therefore, all panels with an Ethernet port feature a built-in FTP server for data file transfer and a Web Gate function for remote access to the application of the panel from a PC with an Internet browser.

Vijeo Designer also allows Magelis Universal panels to browse HTML pages and send e-mails.

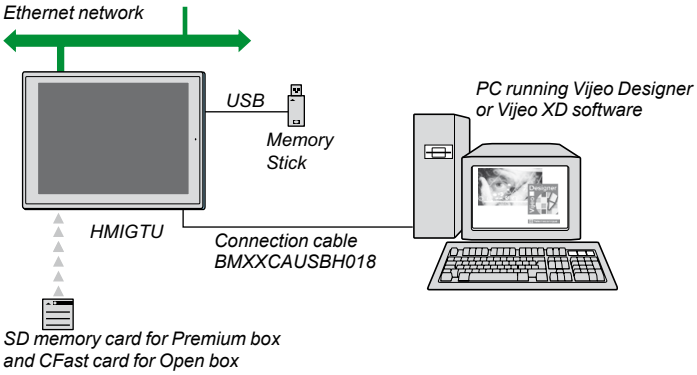
The flexibility of Windows 7 Embedded on Magelis GTU Open box allows simultaneous functions like:
- Running a Vijeo Designer or Vijeo XD application
- Use of Internet Explorer, Media Player, Office viewer and Adobe reader (pdf, doc, xls documents)
- Processing Vijeo Designer data with option “Intelligent Data Service” locally or remotely.

(1) Magelis GTU will be integerated in to MachineStruxure by 4th quarter, 2014.
(2) For more information on the “PlantStruxure™”concept, please refer to our website www.schneider-electric.com/Solutions/Process and Machines Management.
(3) For more information on the “MachineStruxure™” concept, please refer to our “Automation solutions for industrial machines” catalog.

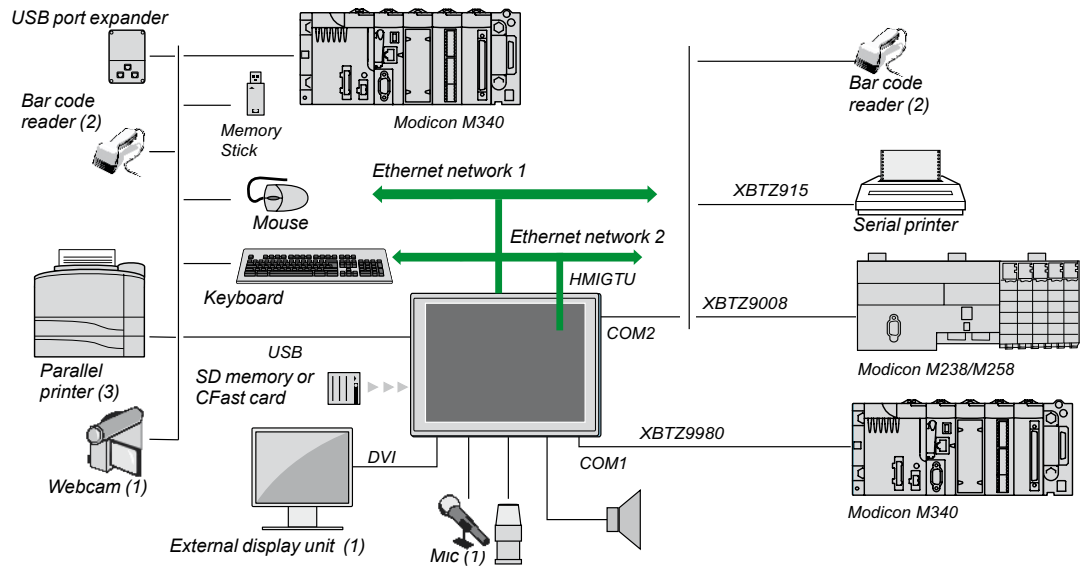
Panel operating modes

The following illustrations show the equipments that can be connected to Universal panels according to their two operating modes.

Edit mode

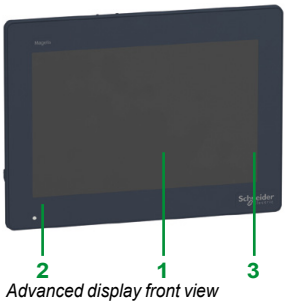

Ethernet network
USB
Memory Stick
PC running Vijeo Designer or Vijeo XD software
HMIGTU
Connection cable BMXXCAUSBH018
SD memory card for Premium box and CFast card for Open box

Operating mode



(1) With Open box unit.
(2) Validated with DataLogic Gryphon bar code reader.
(3) Validated with Hewlett Packard printer via USB/PIO converter.

Operator dialogue terminals
Magelis™ GTU Universal panels
Advanced and Smart display modules



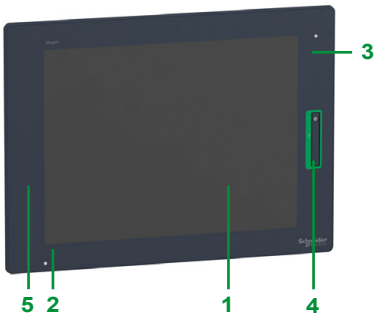
Advanced display front view

Description

Magelis HMIDT 351/551/651 Advanced display module

Front view

1 Single-touch resistive screen for displaying synoptic views (262K colors LCD TFT LED with 100 brightness levels adjustable) in sizes 7", 10", and 12" wide.
2 Multi-color indicator (green, orange and red) showing the panel's operating mode.
3 Aluminium alloy front panel providing IP 66/67 protection when mounted on panel or enclosure door.

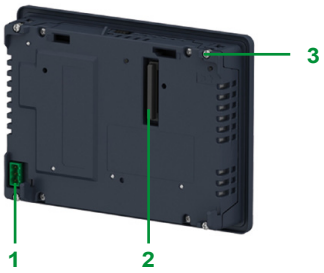


Smart display front view

Magelis HMIDT 542/642/732 Smart display module

Front view

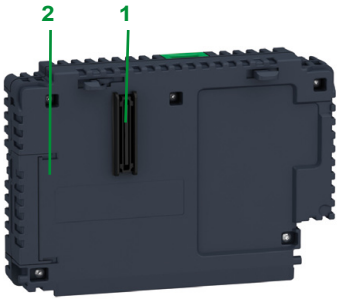
1 Multi-touch resistive screen for displaying synoptic views (16M colors LCD TFT LED with 100 brightness levels adjustable) in sizes 10.4", 12.1", and 15" standard format.
2 Multi-color indicator (green, orange and red) showing the panel's operating mode.
3 Brightness sensor to automatically adjust the level of brightness to environment.
4 Front USB ports 2.0 Host & Device with screw protective cover.
5 Aluminium alloy front panel providing IP 66/67 protection when mounted on panel or enclosure door.



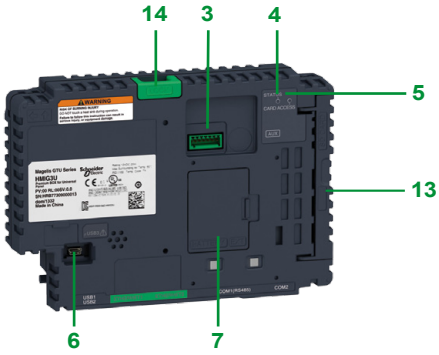
Advanced and Smart display rear view

Advanced and Smart display rear view

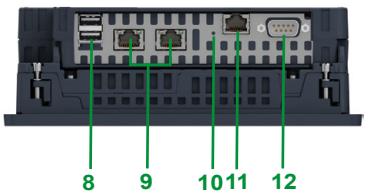
1 Removable screw terminal block for 12...24 V ⎓ power supply.
2 Box interface.
3 4x retractable embedded screw fasteners.



Premium box rear view



Premium box front view



Premium box underside view

Description

Magelis HMIG3U Premium box module

Rear view

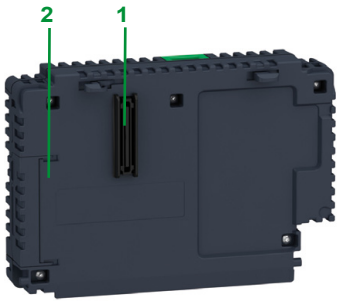
1 Display interface.
2 Storage unit Cover 1 that has an SD card (1 GB) with pre-installed:
- Real time operating system
- Vijeo Designer Run Time

Front and underside views

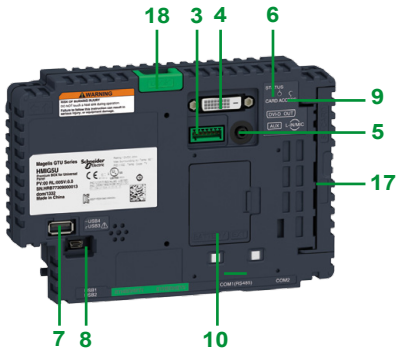
3 Auxiliary interface for alarm, buzzer and speaker outputs.
4 Status LED indicating the operating mode of the terminal.
5 LED indicating access to the SD memory card.
6 Mini-B USB connector for application transfer.
7 Expansion unit cover for optional battery or optional FieldBus card *(1)*.
8 2 Type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication.
9 RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX/1000BASE-T with an activity LED.
10 COM1 LED indicating data transmission.
11 RJ45 connector for RS-485 serial link with isolation (COM1).
12 9-way male SUB-D connector for RS-232C or RS-422/RS-485 serial link to PLCs (COM2).
13 Storage unit Cover 2 for SD slot memory card dedicated to user data.
14 LOCK button to attach the box module and display module.

(1) Expansion unit cover for FieldBus card will be available in Quarter 4, 2014.

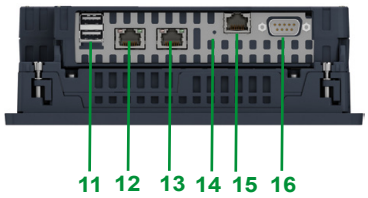
Operator dialogue terminals
Magelis™ GTU Universal panels
Open box module



Open box rear view



Open box front view



Open box underside view

Description

Magelis HMIG5U Open box

Rear view

1 Display interface.
2 Storage unit Cover 1 that has a CFast card (16 GB) with pre-installed Windows® Embedded 7 supplied in 9 languages (English, French, German, Italian, Portuguese, Spanish, Swedish, Chinese, Russian) and also:

- Internet Explorer Version 9.0 as Web browser
- Notepad
- MultiMedia Player 12
- Acrobat Reader, Microsoft Word/Excel Viewer
- Framework.Net 4.0
- CAD Viewer
- VNC Client/Server for remote connection
- Vijeo Citect Web Client
- Vijeo Designer Run Time

Front and underside views

3 Auxiliary interface for Alarm, buzzer and speaker outputs.
4 DVI-D interface to connect Magelis ¡Display or LCD monitor display.
5 Mini-jack connector for microphone input.
6 Status LED indicating the operating mode of the terminal.
7 Type A USB connector for application transfer.
8 Mini-B USB connector for application transfer.
9 LED indicating access to SD or CFast cards.
10 Expansion unit cover for optional battery or optional FieldBus card *(1)*.
11 2 Type A USB host connector for connecting peripherals, transferring applications and Modicon M340 terminal port communication.
12 RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX/1000BASE-T with an activity LED.
13 RJ45 connector for Ethernet TCP/IP link, 10BASE-T/100BASE-TX/1000BASE-T with an activity LED.
14 COM1 LED indicating data transmission.
15 RJ45 connector for RS-485 serial link with isolation(COM1).
16 9-way male SUB-D connector for RS-232C or RS-422/RS-485 serial link to PLCs (COM2).
17 Storage Cover 2 for SD slot and CFast slot card dedicated to user data.
18 LOCK button to attach the box module on to the display module.

(1) Expansion unit cover for FieldBus card will be available in Quarter 4, 2014.

Operator dialogue terminals
Magelis™ GTU Universal panels
Display and box modules

PF131900

HMIDT351

PF131924

HMIDT651

PF131930

HMIDT642

PF131911

HMIG3U

PF131916

HMIG5U

Universal display modules

Data entry method	Size	Resolution	Colors	Touch type	Options	Reference	Weight kg/*lb*
Advanced display							
Via touch screen	7" wide	800 × 480	262K	Single resistive	No	**HMIDT351**	1.200/ *2.600*
	10" wide	1280 × 800	262K	Single resistive	No	**HMIDT551**	2.500/ *5.500*
	12" wide	1280 × 800	262K	Single resistive	No	**HMIDT651**	3.000/ *6.600*
Smart display							
Via touch screen	10.4" 4/3 Standard	800 × 600	16M	Multi resistive	Front USB (A + mini-B) Brightness sensor, Scaler	**HMIDT542**	2.700/ 5.900
	12.1" 4/3 Standard	1024 × 768	16M	Multi resistive	Front USB (A + mini-B) Brightness sensor, Scaler	**HMIDT642**	3.000/ *6.600*
	15" 4/3 Standard	1024 × 768	16M	Multi resistive	Front USB (A + mini-B) Brightness sensor, Scaler	**HMIDT732**	4.500/ *9.900*

Universal box modules

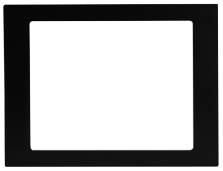
Operating system	RAM memory	Storage units	USB ports	Communi-cation	Multimedia interface	Reference	Weight kg/*lb*
Premium box							
Real Time	256 MB	2 SD cards	2 Hosts (Type A), 1 Device (mini-B)	2 Serials 2 Ethernet Gigabit	Sound output	**HMIG3U**	0.900/ *1.980*
Open box							
Windows® 7 Embedded	2 GB	2 CFast cards 1 SD card	3 Hosts (Type A), 1 Device (mini-B)	2 Serials 2 Ethernet Gigabit	Sound output, Micro phone input, External display output (DVI)	**HMIG5U**	0.900/ *1.980*

***Note**: All display modules are compatible with all box modules.*

Operator dialogue terminals
Magelis™ GTU Universal panels
Separate parts

Separate components

Description	Characteristics	Compatible with terminals	Reference	Weight kg/*lb*
SD memory card system	1 GB, blank	HMIGTU	**HMIZSD1GS**	–
CFast card system	16 GB, blank	HMIGTU	**HMIZCFA16S**	
CFast card	32 GB, blank	HMIGTU	**HMIZCFA32**	
Protective sheets (5 peel-off sheets)	–	HMIDT351	**HMIZG63**	–
		HMIDT551	**HMIZD65W**	–
		HMIDT651	**HMIZD66W**	–
		HMIDT542	**HMIZG65**	–
		HMIDT642	**HMIZG66**	–
		HMIDT732	**MPCYK50SPSKIT**	–
Plastic covers for harsh environments (IP 67 protection)	–	HMIDT542	**HMIZDCOV5**	–
		HMIDT642	**HMIZDCOV6**	–
		HMIDT732	**HMIZDCOV7**	–



XBTZGCO●

Description	Description	Length m/*ft*	Reference	Weight kg/*lb*
Mechanical adaptors for substitution of Magelis range terminals	From XBTGT5230 to HMIDT542	–	**XBTZGCO4**	–
	From XBTGT4●●● to HMIDT351	–	**HMIZGCO1**	
Remote USB port for HMI terminals	Enables the USB Type A port to be located remotely on the rear of the XBT or HMIGTU terminal on a panel or enclosure door (Ø 21 mm fixing device)	1/ *3.28*	**XBTZGUSB**	–
Remote USB port for HMI panel	Enables the USB mini-B port to be located remotely on the rear of the HMIGTU panel, on a panel or enclosure door (Ø 21 mm fixing device)	1/ *3.28*	**HMIZSUSBB**	–
DVI-D cable	Enable to connect an external Magelis *i*Display to the HMIG5U Open Box	10/ *32.81*	**HMIYCABD-VI1011**	–
Battery	HMIGTU	–	**HMIZGBAT**	–
Auxiliary Connector Sold in set of 5 units	HMIGTU	–	**HMIZGAUX**	–

XBTZGUSB

Spare parts

Description	For use with terminals	Reference	Weight kg/*lb*
Seals	HMIDT351	**HMIZD53W**	–
	HMIDT551	**HMIZD55W**	–
	HMIDT651	**HMIZD56W**	–
	HMIDT542	**HMIZD55**	–
	HMIDT642	**HMIZD56**	–
	HMIDT732	**HMIZD57**	–
USB fastenings Sold in lots of 5	HMIGTU (USB type A)	**HMIZGCLP1**	–
Power supply connector Sold in lots of 5	HMIGTU (direct connection)	**HMIZGPWS**	0.030/ *0.066*
	HMIGTU (right angle connection)	**HMIZGPWS2**	0.030/ *0.066*

Presentation: page 6 | Description: page 10 | Connections: page 20 | Substitution: page 19

Operator dialogue terminals
Magelis™ GTU Universal panels
Replacement parts

Cables for application transfer - Terminal to PC

Type of terminal (terminal end connector)	Connector (PC end)	Type	Length m/*ft*	Reference *(1)*	Weight kg/*lb*
HMIGTU	USB	USB	1.80/ *5.91*	**BMXXCAUSBH018**	–

Printer connection cables

Type of printer *(2)*	Connector (printer end)	Type	Length m/*ft*	Reference	Weight kg/*lb*
HMIGTU panels	SUB-D female 25-way	RS-232C (COM2)	2.5/ *8.20*	**XBTZ915**	0.200/ *0.441*
Serial printer for HMIGTU panels	SUB-D female 9-way	USB/RS-232C	1.80/ *5.91*	**HMIZURS**	–

Adaptors and isolation boxes for HMIGTU panels

These 3 adaptors are used with the connection cables depending on the application concerned.
For example, the XBTZ968 cable is used with the XBTZG909 adaptor, to connect a Twido controller (via its terminal port) to an XBTGT2●●0 terminal (via its COM1 port).

Description	Type of connector (automation product end)	Physical link (HMIGTU terminal end)	Length m/*ft*	Reference	Weight kg/*lb*
Adaptor for HMIGTU	25-way SUB-D connector	RJ45 connector	0.2/ *0.66*	**XBTZG939**	–
Adaptors for HMIGTU (COM2 port)	25-way SUB-D connector	9-way SUB-D connector, RS-232C	0.2/ *0.66*	**XBTZG919**	–

Description	For use with	Link to isolate	Reference	Weight kg/*lb*
Serial link isolation units for HMIGTU	- Isolated link on 9-way SUB-D connector *(3)* - Box power supply via USB port of terminal. Incorporates a USB port expander.	RS-232C/RS-485 (COM2)	**XBTZGI232**	–

XBTZGI485

(1) Cable included (depending on model) with Vijeo Designer software packages (refer to HMI Software catalog).
(2) Parallel printer (see page 9).
(3) Male connector with **XBTZGI232**.

Operator dialogue terminals
Magelis™ GTU Universal panels
Connection accessories

TSXPCX1031

Cables for connecting Magelis terminals to other Schneider Electric products

Automation product type	Type of connector (automation product end)	Protocol	Type of terminal	Link	On port	Length m/*ft*	Reference	Weight kg/*lb*
Twido, Nano, Modicon TSX Micro, Modicon Premium	Terminal port, 8-way female mini-DIN	Uni-TE (V1/V2), Modbus	HMIGTU	RS-485	COM1	2.5/ *8.20*	**XBTZ9780**	0.180/ *0.397*
						10/ *32.80*	**XBTZ9782**	–
			HMIGTU	RS-232	COM2	2.5/ *8.20*	**TSXPCX1031**	–
Modicon M340 Modicon M238 Modicon M258 Modicon M2●1	RJ45	Modbus	HMIGTU	RS-485	COM1	2.5/ *8.20*	**XBTZ9980**	0.230/ *0.507*
						10/ *32.80*	**XBTZ9982**	–
					COM2	2.5/ *8.20*	**XBTZ9008**	
Modicon M340	USB Mini-B	Terminal port	HMIGTU	USB	USB type A	1.8/ *5.91*	**BMXXCAUSBH018**	0.230/ *0.507*
						4.5/ *14.76*	**BMXXCAUSBH045**	–
Modicon Quantum	9-way male SUB-D	Modbus	HMIGTU	RS-232C	COM2	2.5/ *8.20*	**XBTZ9710** + *(1)*	0.210/ *0.463*
						3.7/ *12.14*	**990NAA26320**	0.290/ *0.639*
Modicon STB	HE13 (NIM, network interface module)	Modbus	HMIGTU	RS-232C	COM2	2/ *6.56*	**STBXCA4002**	0.210/ *0.463*
						2.5/ *8.20*	**XBTZ988** + *(1)*	0.220/ *0.485*
Modicon Momentum M1	RJ45 (port 1 on Momentum M1)	Modbus	HMIGTU	RS-232C	COM2	2.5/ *8.20*	**XBTZ9711** + *(1)*	0.210/ *0.463*
TeSys U, T starters ATV 312/61/71 variable speed drives ATS 48 starters Lexium 05 Preventa XPSMC	RJ45	Modbus	HMIGTU	RS-485	COM1	3/ *9.84*	**VW3A8306R30**	0.060/ *0.132*
						2.5/ *8.20*	**XBTZ9980**	–
						10/ *32.80*	**XBTZ9982**	–
					COM2	2.5/ *8.20*	**XBTZ9008**	

(1) Adaptor **XBTZG919** *to be used with cables with " + (1) " after the reference.*

Operator dialogue terminals
Magelis™ GTU Universal panels
Connection accessories

XBTZG9772

XBTZG9731

Cables and adaptors for connecting Magelis terminals to third-party PLCs

Mitsubishi, Melsec PLCs

Description *Driver used*	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM2)	Length m/*ft*	Reference	Weight kg/*lb*
Connection cable, ***Q Link (SIO)***	HMIGTU	9-way SUB-D / 9-way SUB-D	RS-232C	5/ *16.40*	**XBTZG9772**	–
Connection cable, ***Q CPU (SIO)***	HMIGTU	9-way SUB-D / mini-DIN	RS-232C	5/ *16.40*	**XBTZG9774**	–
Connection cable, ***A Link (SIO)***	HMIGTU	9-way SUB-D / 25-way SUB-D	RS-232C	5/ *16.40*	**XBTZG9731**	–
Connection cable, ***FX (CPU)***	HMIGTU	9-way SUB-D / mini-DIN	RS-232/ RS-422	5/ *16.40*	**HMIZ951** ▲	–

Omron, Sysmac PLCs

Description *Driver used*	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM2)	Length m/*ft*	Reference	Weight kg/*lb*
Connection cables, ***Link (SIO)***	HMIGTU	9-way SUB-D / 9-way SUB-D	RS-232C	5/ *16.40*	**XBTZG9740**	–
		9-way SUB-D / 25-way SUB-D	RS-232C	5/ *16.40*	**XBTZG9731**	–
Connecting cables ***FINS (SIO)***	HMIGTU	9-way SUB-D / 9-way SUB-D	RS-232C	5/ *16.40*	**XBTZG9740**	–

Rockwell Automation, Allen-Bradley PLCs

Description *Driver used*	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link (COM2)	Length m/*ft*	Reference	Weight kg
Connection cables ***DF1 Full Duplex***	HMIGTU	9-way SUB-D / 25-way SUB-D	RS-232C	5/ *16.40*	**XBTZG9731**	–
Connection cables, ***DH485***	HMIGTU	9-way SUB-D	RS-485	5/ *16.40*	**XBTZ9732** + *(1)*	–

XBTZG9731

Siemens, Simatic PLCs

Description *Driver used*	Type of terminal	Type of connector (fitted to cable, excluding adaptor)	Physical link	Length m/*ft*	Reference	Weight kg/*lb*
Connection cable, ***PPI, S7 200***	HMIGTU	RJ45/9-way SUB-D	RS-485 (COM1)	2.5/ *8.20*	**XBTZG9721**	–
Connection cables, ***MPI port, S7 300/400***	HMIGTU	9-way SUB-D / 9-way SUB-D	RS-232C (COM2)	3/ *9.84*	**XBTZG9292**	–
	HMIGTU	RJ45/flying leads other end	RS-485 *(2)* (COM1)	3/ *9.84*	**VW3A8306D30**	0.150/ *0.331*
		RJ45/9-way SUB-D	RS-485 *(2)* (COM1)	2.5/ *8.20*	**XBTZG9721**	–

(1) Adaptor **XBTZG939** *to be used with cables with " + (1) " after the reference (see page 15).*
(2) Non-isolated RS-485 serial link, 12 Mbps.

▲ Available: 3rd quarter 2014

Operator dialogue terminals
Magelis™ GTU Universal panels
Connection accessories

TSXSCA62

TSXPACC01

TSXSCA64

VW3A8306TF10

Connection of Magelis terminals via serial links and Ethernet network

Type of bus/ network	Tap-off units	Connector (tap-off unit side)	Terminal type	Length m/*ft*	Reference	Weight kg/*lb*
Uni-Telway serial link	Subscriber socket **TSXSCA62**	15-way female SUB-D	HMIGTU	3/ *9.84*	**VW3A8306**	0.150/ *0.331*
	Connection box **TSXPACC01**	8-way female mini-DIN	HMIGTU	2.5/ *8.20*	**XBTZ9780**	0.180/ *0.396*
Modbus serial link	Subscriber socket **TSXSCA64**	15-way female SUB-D	HMIGTU	3/ *9.84*	**VW3A8306**	0.150/ *0.331*
	T-junction box	With integrated cable, RJ45 fitted	HMIGTU	1/ *6.56*	**VW3A8306TF10**	–
Ethernet TCP/IP network	Hubs 499 NEH/NOH Switches 499 NES, 499 NMS, 499 NSS and 499 NOS	RJ45	HMIGTU	2/ *6.56*	**490NTW00002**	–
				5/ *16.40*	**490NTW00005**	–
				12/ *39.37*	**490NTW00012**	–
				40/ *131.23*	**490NTW00040**	–
				80/ *262.47*	**490NTW00080**	–

Connection of Magelis terminals to fieldbuses

Type of bus/network	Connection components	Type of terminal	Reference	Weight kg/*lb*
FIPWAY, FIPIO	USB gateway	HMIGTU (only on Premium Box)	**TSXCUSBFIP**	–
Modbus Plus	USB gateway	HMIGTU	**XBTZGUMP**	–

Operator dialogue terminals
Magelis™ GTU Universal panels
Equivalent product table

Equivalent product table between XBTGT terminals and HMIGTU terminals

Old range XBTGT	New range HMIGTU	Comments
XBTGT2120/2220/2330/2430	HMIDT351 + HMIG3U	Cut-out different, no adapter
XBTGT4230/4330	HMIDT351 + HMIG3U	Cut-out different, adapter HMIZGC01
XBTGT4340	HMIDT351 + HMIG3U	Cut-out different, adapter HMIZGC01, no video support
XBTGT5230	HMIDT542 + HMIG3U	Cut-out different, adapter XBTZGCO4
XBTGT5330/5430	HMIDT542 + HMIG3U	–
XBTGT5340	HMIDT542 + HMIG3U	No video support
XBTGT6330	HMIDT642 + HMIG3U	–
XBTGT6340	HMIDT642 + HMIG3U	no video support
XBTGT7340	HMIDT732 + HMIG3U	no video support

Comments: when upgrading from the Magelis XBT range to the Magelis GTU range, the following parameters must be taken into account:
- connection to the Profibus DP and Device Net fieldbuses is possible in the next software release
- serial ports COM1 and COM2 are identical but inverted
- no CF card but SD card provided as optional storage unit
- no CANopen Master connection on Magelis GTU

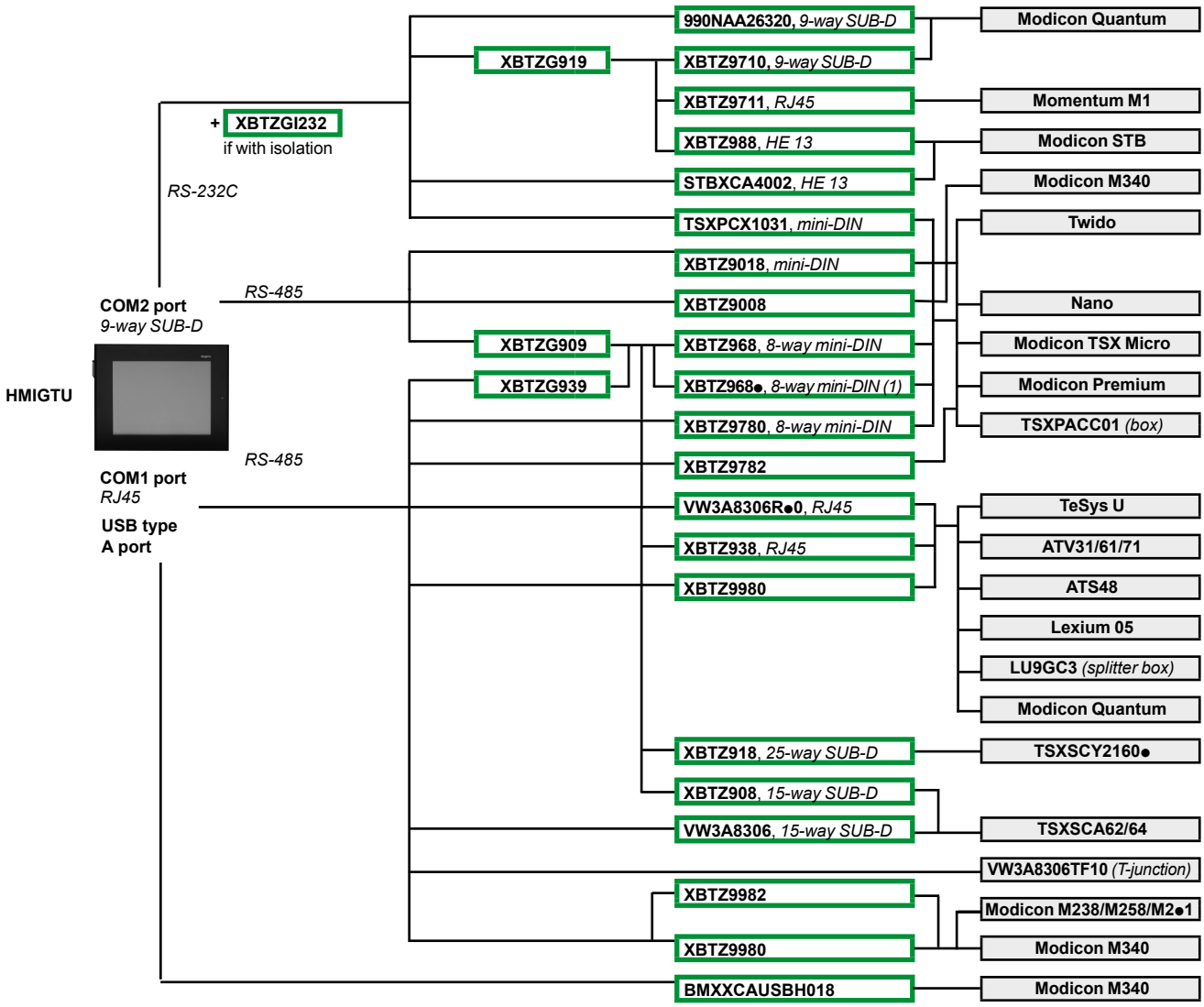
Equivalent product table between HMIGTW terminals and HMIGTU terminals

Old range XBTGTW/HMIGTW	New range HMIGTU	Comments
HMIGTW5354	HMIDT542 + HMIG5U	cut-out different, no adapter
HMIGTW7354	HMIDT732 + HMIG5U	3 USB hosts, no jack output but auxillary output for speakers
XBTGTW652	HMIDT642 + HMIG5U	–

Comments: when upgrading from the Magelis XBTGTW/HMIGTW range to the Magelis GTU range, the following parameters must be taken into account:
- no CF card but CFast card is provided as optional storage unit
- no Windows XP Embedded but Windows 7 Embedded is provided for operating system

Operator dialogue terminals
Magelis™ GTU Universal panels
Connection system

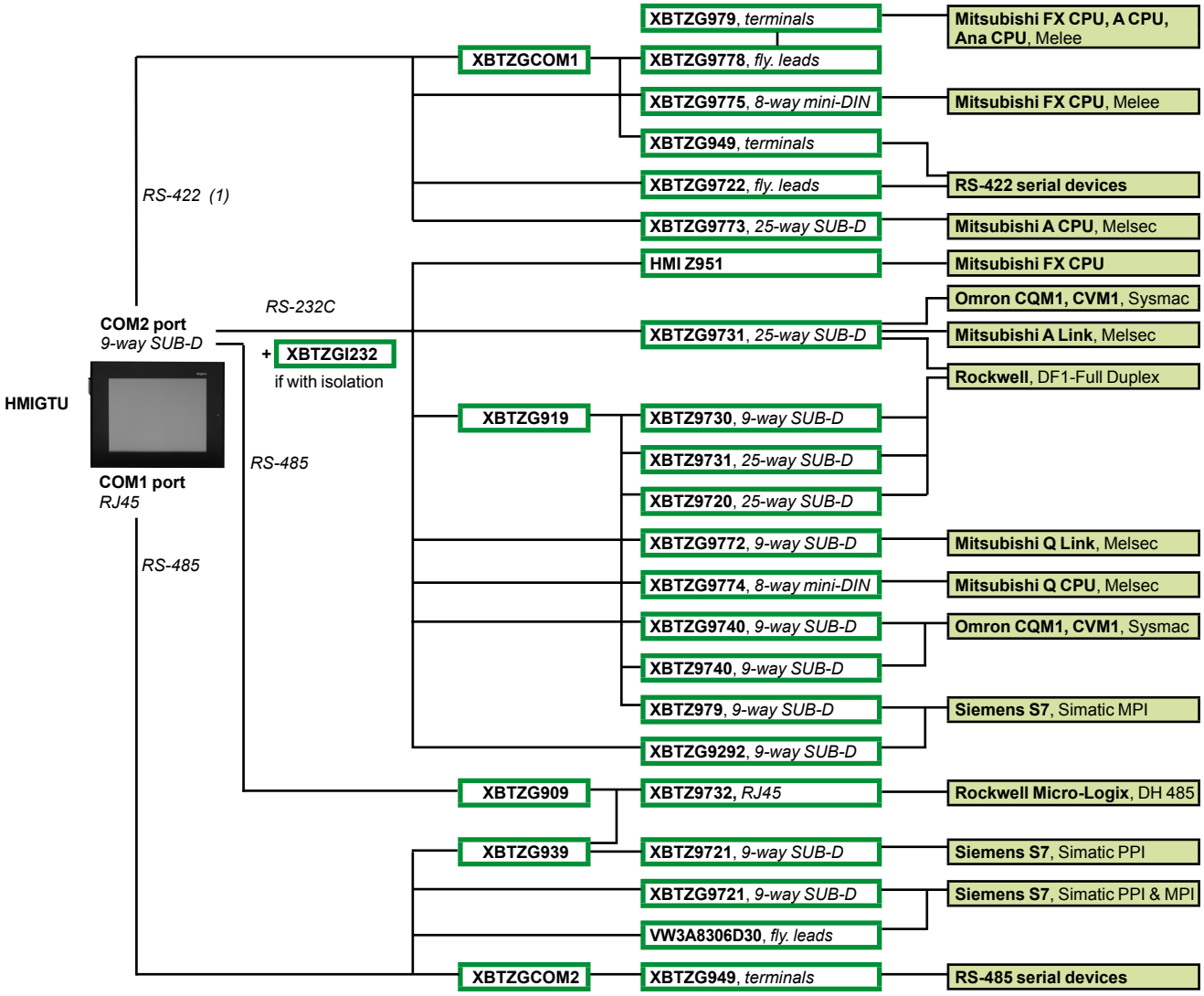
HMIGTU terminals and Schneider Electric products



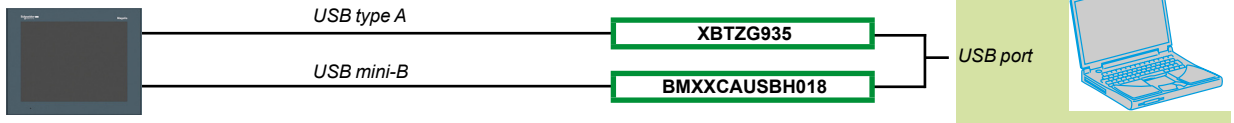
(1) ● defines the length:
- **0**, *2.5 m (elbowed connector)*
- **1**, *5 m*
- **6**, *16 m*
- **7**, *20 m*
- **8**, *25 m*

Operator dialogue terminals
Magelis™ GTU Universal panels
Connection system

HMIGTU terminals and third-party PLCs



Application transfer from HMIGTU terminals to PC



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